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REMARKS

Claims 1-36 of the application stand rejected. Applicant respectfully requests reconsideration of pending Claims 1-36 in light of the following remarks.

35 U.S.C. §103

Claims 1-36 stand rejected under 35 U.S.C. §103 as being unpatentable over the combination of Tayouchi, U.S. Patent No. 6,006,251 (hereafter Tayouchi) in view of Kyker et al.., U.S. Patent No. 6, 026,477 (hereafter "Kyker"). The Examiner suggests that Tayouchi teaches the invention substantially as claimed, with the exception of "a fork and branch mechanism." The Examiner contends, however, that Kyker teaches this element and that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine these references because Kyker's method of using a branch mechanism would improve the transaction request management of Toyouchi by reducing the use of system resources and make the entire system more efficient. Applicants respectfully traverse the Examiner's rejection.

First, Applicants respectfully submit that the Examiner inappropriately combined Tayouchi and Kyker. Specifically, Tayouchi discusses a service providing system for providing services suitable to an end user request based on characteristics of a request, attributes of a service and operating conditions of a processor. Kyker, on the other hand, describes a branch recovery mechanism to reduce processor front end stall time by providing path information for both correct and incorrect instructions mixed in the instruction pool. Applicants respectfully submit that the references cannot be combined in the manner suggested by the Examiner. These references describe technology in completely unrelated areas and those of ordinary skill in one area are unlikely to be skilled in the other, thus rendering a combination unlikely. Furthermore, these technology areas are not even remotely related such that features in one are likely to be applicable to the other. Tayouchi essentially describes a system with a plurality of computers, while Kyker describes instruction pipelines and how micro-ops are loaded into instruction pipelines (see e.g., Kyker, Background of the Invention).

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      Applicants respectfully point out that the mere fact that the references, if they may be combined, may provide a benefit, does not render the combination of the references obvious or proper. As set out in M.P.E.P. § 706.02(j), "(t)here must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." Applicants submit that there is no such suggestion or motivation. As previously stated, the Examiner suggests that it would have been obvious to combine Tayouchi with Kyker "because Kyker's method of using a branch mechanism would improve the transaction request management of Toyouchi by reducing the use of system resources and make the entire system more efficient." Applicants respectfully disagree. Neither Tayouchi nor Kyker suggest this combination for at least the reason described above, namely that they are in completely unrelated technology areas. The fact that the combination (assuming it is even possible to combine these references) *may* provide an advantage does not prima facie mean that the combination is obvious. Applicants submit that since these references are in significantly different technology areas, it would have been unlikely, barring hindsight, that such a combination would have been obvious to one of ordinary skill in the art at the time of the invention. Additionally, there is no teaching in either reference to properly enable implementation of such a combination. Applicants therefore respectfully submit that the combination of these references is improper and respectfully request the Examiner to withdraw the 35 U.S.C. § 103 rejections to Claims 1-36.

      Even assuming arguendo these references were properly combined, Applicants respectfully submit that Tayouchi and Kyker do not render Claims 1-36 unpatentable. As previously discussed, the Examiner concedes that Tayouchi does not teach a fork and branch mechanism. The Examiner suggests, however, that Kyker teaches this element. Without addressing whether Tayouchi teaches all elements of the claimed invention with the exception noted by the Examiner, Applicants strongly disagree that Kyker teaches the element(s) not taught by Tayouchi. One section of Kyker highlighted by the Examiner states:

> "Next, it is determined whether the branch instruction is mispredicted. If the branch instruction is mispredicted, then the following steps are performed: The Front End section is flushed and reloaeded with instructions corresponding to a correct path. And,

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> instructions corresponding to the correct path are loaded from the Front End section into the instruction pool before the mispredicted branch instruction is retired."

Kyker, Col. 3, lines 55-62.

The remaining section of Kyker (Col. 7, lines -1 and Col. 8, lines 13-16) highlighted by the Examiner expand on this concept further (e.g., "[U]nlike prior art instruction pipelines ... the present invention does not stall or wait for the mispredicted branch instruction to be retired before loading the ROB 70 with the correct path."). Applicants fail to see the relevance of these sections to the elements of the claimed invention. The sections of Kyker highlighted by the Examiner simply describe an improved branch recovery mechanism and how it may be implemented. These sections cannot be construed in any way to have relevance in a multi-node architecture wherein various agents interact to enable multiple processors to efficiently work together to perform a task in the manner claimed in Claims 1-36. Applicants therefore submit that Claims 1-36 are patentable over Tayouchi and/or Kyker, alone or in combination, and respectfully request the Examiner to withdraw the 35 U.S.C. §103 rejection to these pending claims.

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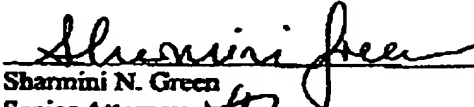42390P9864   PATENT

CONCLUSION

Based on the foregoing, Applicant respectfully submits that the applicable
objections and rejections have been overcome and that pending Claims 1-36 are in
condition for allowance. Applicant therefore respectfully requests an early issuance of a
Notice of Allowance in this case. If the Examiner has any questions, the Examiner is
invited to contact the undersigned at (310) 406-2362.

If there are any additional charges, please charge Deposit Account No. 50-0221.

Respectfully submitted,

Dated: March 18, 2005

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